

植物防疫所は病害虫の被害から日本の農

Plant Protection Stations aim at blocking harmful plant pests and diseases for

植物の病害虫が新たな地域に侵入すると、思いもよらぬ大きな被害を与えることがあります。ヨーロッパで猛威を振るい植物検疫開始のきっかけとなったブドウネアブラムシ、北米大陸への移民の原因となったといわれるアイルランドのジャガイモ疫病、日本からアメリカに渡り大害虫となったマメコガネなどその例は数え切れないほどで、一度侵入した病害虫の根絶が難しいことも歴史が物語っています。

日本は四方を海に囲まれているため病害虫が自ら侵入してくることは多くはありませんが、明治以後リンゴワタムシ、ヤノネカイガラムシなどの病害虫が海外からの貨物に紛れて侵入し、日本の農作物に大きな被害をもたらしたため、大正3(1914)年に植物検疫が開始されました。

国際貿易が活発になり、コンテナによる海上物流や航空輸送網、低温での流通管理技術の発達により日本に輸入される植物類の種類や数量は大幅に増加し、それに伴って病害虫が侵入する危険性は、従来にも増して大きくなっています。

植物防疫所は、日本の植物に被害をもたらす海外からの病害虫の侵入を防ぐため、全国の港や空港で輸入検疫を行っているほか、特殊な病害虫の国内でのまん延を防ぐための国内検疫、諸外国の要求に応じた輸出検疫などの業務を行い、日本の農業と緑を守るために力を注いでいます。



侵入を警戒する主な病害虫

チチュウカイミバエ



生果実の大害虫。成虫は果実に産卵し、幼虫は果肉を食べる。
分布地域: アフリカ、南アメリカ、ヨーロッパ、オーストラリア、ハワイなど
体長: 4.5~5.5mm

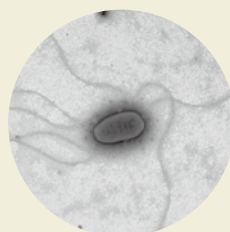


▲ミバエ類によるアンズの被害
Apricots damaged by fruit flies

Mediterranean fruit fly (*Ceratitis capitata*)

An insect pest that causes serious damage to many types of fruits. Adults lay eggs on fruits; larvae eat into fruits.
Distribution: Africa, South America, Europe, Australia, Hawaii, etc.
Body length of adults: 4.5 to 5.5 mm

火傷病



リンゴ、ナシなどの果樹やサンザシ、ビラカンサなどの花木類に被害が著しい細菌による病気。本病による症状は火傷(やけど)にあったような外観を呈し、樹全体が枯れる。
分布地域: 北アメリカ、ヨーロッパ、アジア、ニュージーランドなど



▲火傷病に侵された被害樹
An apple tree damaged by fire blight

Fire blight (*Erwinia amylovora*)

A bacterial disease that causes severe damage to fruit trees such as apple and pear. It also damages firethorn, pyracantha and other flowering trees/shrubs. The infested tree looks as if it was burned, and eventually the entire plant would wither and die.
Distribution: North America, Europe, Western Asia, New Zealand, etc.

業と緑を守っています。

agriculture and forestry.



When plant pests and diseases (hereinafter "pests") are introduced into a virgin area, they may cause unexpectedly huge loss to crops and other plant resources. There are many examples including phylloxera in Europe, which caused serious damage to grapes over the region and triggered the introduction of the first plant quarantine; potato blight in Ireland, which sparked the large scale emigration to North America; and Japanese beetle in the United States, which became a devastating pest after the introduction from Japan. The history has shown us that the eradication efforts were rarely successful once pests were introduced.

Because Japan is surrounded by the sea, few pests can travel into Japan on their own. However, since the mid 19th century (after the end of the national isolation policy for a few centuries), pests including woolly apple aphid and arrowhead scale have been introduced into Japan from overseas via cargo. These incidents seriously threatening agricultural production, led to the introduction of Japanese plant quarantine policy, which was established and came into effect in 1914.

International trade has been getting increasingly active. The distribution system and network such as sea container and air-transport are further enlarging, supported by the relevant technological development, e.g. cold storage. Accordingly, more varieties and larger quantities of plant products have been and will be imported into Japan, posing greater risk of pest introduction.

Plant Protection Stations aim at saving plant resources in Japan, preventing such introduction by conducting import quarantine at seaports and airports throughout Japan. Additionally, domestic quarantine is in place to prevent the spread of the designated pests within Japan. There is also export quarantine so that the plants and plant products exported from Japan will meet the importing requirements of other countries.

Major pests of serious concern in import quarantine

コドリंगा



リンゴ、モモ、クルミなどの大害虫。成虫は未熟果や葉面に産卵、幼虫は果実の内部を食害する。
分布地域：温帯全域（日本を除く）
開張：18～22mm



▲コドリंगाの幼虫が食入した果実
An apple fruit eaten into by a codling moth larva

Codling moth
(*Cydia pomonella*)

An insect pest that causes significant damage to apple, peach, walnut and other fruit crops. Adults lay eggs on immature fruits or leaves; larvae eat into fruits.
Distribution: Temperate zones.
Wingspan: 18 to 22 mm

タバコベと病



ナス科の植物、特にタバコ、トマト、トウガラシなどに大きな被害を与える病気。この病気にかかると、葉が変形してしまい、育たなくなり、ひどくなると枯死する。
分布地域：ヨーロッパ、南北アメリカ、オーストラリアなど



▲タバコベと病を発病したタバコ
Tobacco plants attacked by tobacco blue mold

Tobacco blue mold
(*Peronospora tabacina*)

A disease that is destructive to plants of the Solanaceae family, especially tobacco, tomato and chili pepper. Plants affected by tobacco blue mold would have deformed leaves and stop growing. In serious cases, the plant would wither and die.
Distribution: Europe, North and South America, Australia, etc.

植物検疫は日本全国において 病害虫の侵入・まん延を防いでいます。

Plant quarantine is in place throughout Japan to prevent introduction and spread of pests.

植物防疫所では、植物の病害虫が海外から侵入することを防ぐための「輸入検疫」、諸外国の要求に対応する「輸出検疫」、そして国内の病害虫対策を講ずる「国内検疫」と国の内外に向けて検疫を行っています。これらの検疫を実施するために、植物防疫所には専門的な資格を有する植物防疫官が配置されています。

Plant Protection Stations implement quarantine procedures including import quarantine to prevent plant pest introduction, export quarantine to meet requirements of other countries and domestic quarantine to control spread of pests within the country. The qualified quarantine officials with technical expertise are deployed to nationwide Plant Protection Stations to implement these quarantine procedures.



■植物検疫は植物防疫法や国際植物防疫条約に基づいて、厳格に行われています。

Plant quarantine is strictly implemented in accordance with the Plant Quarantine Act and the International Plant Protection Convention.